

AMENDMENTS TO THE CLAIMS

1-8. (Cancelled)

9. (Currently Amended) A method for controlling the transmission of data between a first and second wireless station over a wireless transmission medium connecting the first and second station, said method comprising:

the first wireless station receiving a request for a new data link having a first channel capacity at a first priority level generated from a first application at the first station;

the first wireless station determining an available free channel capacity of the wireless transmission medium, the free channel capacity including a currently unused capacity and at least a portion of capacity currently allocated to data links having a priority level less than the first priority level;

the first wireless station determining that the free channel capacity at the first priority level is less than the requested first channel capacity; [[and]]

responsive to the free channel capacity determination, the first wireless station determining that the establishment of the new data link should be delayed for a first period of time; and

the first wireless station delaying the establishment of the new data link for [[a]] the first period of time.

10. (Currently Amended) The method in accordance with claim 9, further comprising: the first wireless station preventing the degradation of already-existing data links having a priority level equal to the first priority level by excluding from the determination of free channel capacity the capacity currently allocated to data links having a priority level equal to the first priority level.

11. (Currently Amended) The method in accordance with claim 10, wherein a maximum threshold level of capacity currently allocated to data links having a priority level less than the first priority level that can be considered as free channel capacity is defined at the first wireless station, and applied by the first wireless station in determining free channel capacity, [[and]] the method further ~~comprises~~ comprising preventing the first wireless station from characterizing all of the channel capacity currently allocated to data links having a priority level less than the first priority level above the maximum threshold level as free channel capacity.

12.-16. (Canceled)

17. (Currently Amended) The method in accordance with claim 9, further comprising:

after the first period of time, the first wireless station determining again that the free channel capacity at the first priority level is less than the requested first channel capacity; [[and]]
the first wireless station determining that the establishment of the new data link should be delayed for a second period of time; and

the first wireless station delaying the establishment of the new data link for [[a]] the second period of time, the second period of time equal to the first period of time increased by a discrete value.

18. (Currently Amended) The method in accordance with claim 17, wherein the determining of free channel capacity and delaying of the establishment of the new data link are repeated until

either the establishment of [[a]] the new data link is permitted or the attempt to establish the new data link is finally halted by a termination condition.

19. (Previously Presented) The method in accordance with claim 11, wherein the threshold level is a percentage of the capacity currently allocated to data links having a priority level less than the first priority level.

20. (Canceled)

21. (Previously Presented) The method in accordance with claim 9, further comprising:
the first wireless station establishing the new data link after the first period of time,
the second wireless station determining that a second new data link established by the first wireless station having a priority equal to a priority of the one or more existing data links would cause a loss of quality one or more existing data links; and
the second wireless station sending a message to the first wireless station instructing the first wireless station to at least temporarily suspend the second new data link for a second period of time.

22. (Previously Presented) The method in accordance with claim 21, further comprising, after the second period of time, the second wireless station determining that a third new link established by the first wireless station having a priority equal to a priority of the one or more existing data links would cause a loss of quality of the one or more existing data links; and

sending a second message to the first wireless station instructing the first wireless station to at least temporarily suspend the third new data link for a third period of time equal to the second period of time increased by a discrete value.

23. (Previously Presented) The method in accordance with claim 21, wherein the determining that a second new data link established by a first wireless station having a priority equal to a priority of the one or more existing data links would cause a loss of quality of the one or more existing data links comprises detecting a buffer overflow condition.